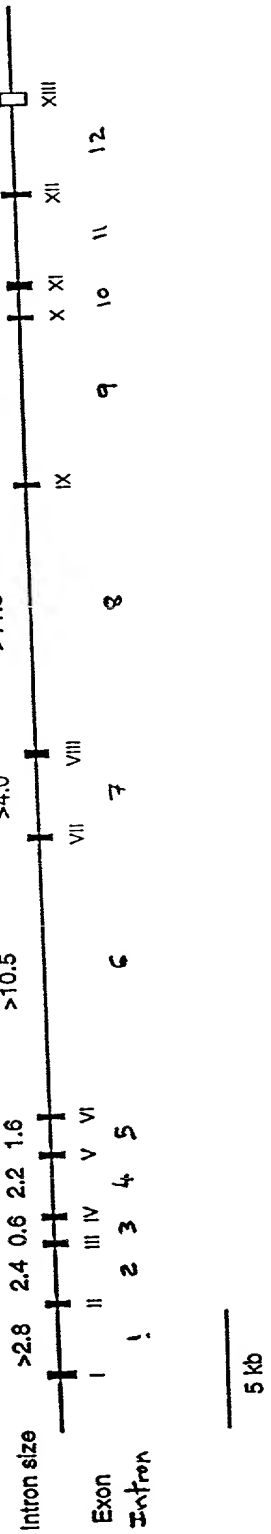
Figure 1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2.4
0.6
2.2
1.6
>10.5
>4.0
>11.3
>7.5
0.9
3.5
>4.5
Exon
Intron
I
II
III
IV
V
VI
VII
VIII
IX
X
XI
XII
XIII
1
2
3
4
5
6
7
8
9
10
11
12
5 kb

Figure 2A

promoter and exon 1

ACTGCGGAGATGAGGGTCTAGAAGGTGGTGGCGGGGCAT
GTGGACCGTTGTAAGGGCTCTGGGG**TTCCTGGGTGGCGCT**
GGCGAAGTCCCTACTCACAGTGACCAACCATGATGATGGT
CCCGATAGAGGAGGAGAGGGAGGAGGAGGGAAAAGGAAG
GGTGAGGGGCTCAGAGGGGAGAGCTGGGAGGAGGGGAGA
CATAGGTGGGGGAAGGGGTAGGAGAAAGGGGAAGGGAGC
AAGAGGGTGAGGGGCACCAGGCCCCATAGACGTTTTGGC
TCAGCGGCCACGAGG**CTTCATCAGCTCCCGCCCCAAAAC**
GGAAGCGAGGCCGTGGGGGCAGCGGCAGCATGGCGGGGC
TTGTCTTGGCGGCCATGGCCCCGCCCCCTGCCCGTCCGA
TCAGCGCCCCGCCCCGTCCCCGCCCCGACCCCGCCCCGG
GCCCGCTCAGGCCCCGC**CCCTGCCGCCGGAATCCTGAAG**
CCCAAGGCTGCCCGGGGGCGGTCCGGCGGCGCCGGCGAT
GGGGC*ATAAAA*CCACTGGCCACCTGCCGGGCTGCTCC

*TGCGTGCGCTGCCGTCCCGGATCC*ACCGTGCCTCTGCGG
CCTGCGTGCCCGGAGTCCCCGCCTGTGTCGTCTCTGTCG
CCGTCCCCGTCTCCTGCCAGGCGCGGAGCCCTGCGAGCC
GCGGGTGGGCCCCAGGCGCGCA**GACATGGGCTGCTCCGC** A
CAAAGCGCGCTGGGCTGCCGGGGCGCTGGGCGTCGCGGG
GCTACTGTGCGCTGTGCTGGGCGCTGTCATGATCGTGAT
GGTGCCGTCGCTCATCAAGCAGCAGGTCCTTAAG

GTGGGTGAGGGAGACCCCAGGGGGTCCGCGCACGGACCC
GGGCTGTTGGGCGCTGGGCGCCGGGAGGACCCGCGCGTT
GCGGTGGGTGGGCGACCGCAGCGGAATCGGCGCCCGGGC
CTGGCGCCGCAGAACACGAGGGAGGCCAGGCGCTTCGGG
AGGGGCTGCTGCCCGCCTCCCCACCACCCTCACC

Figure 2B

exon 2

AGCCTCATGTGCGAAGGGCTTTCCCACCACCTCCTATCC
CAAGCTCCCGCCGAGGAGCCCCTTCCCTGGCCGGGCTCG
GGCAGCTGTTCCGGAGCCTTGTGGTGGGGCGTGGGGCC
CTCATCACTCTCCTCACAAGCGTACTTGTCCCTTCCC
CTGCAG

AACGTGCGCATCGACCCCAGTAGCCTGTCCTTCAACATG
TGGAAGGAGATCCCTATCCCCTTCTATCTCTCCGTCTAC
TTCTTTGACGTCATGAACCCCAGCGAGATCCTGAAGGGC
GAGAAGCCGCAGGTGCGGGAGCGCGGGCCCTACGTGTAC
AG

GTGAGGCTGTGTCCACGTGATGGTGGACGGGCCGGCTGA
CGCTGGGCATGGGACGGGTCTCANAGTGGACGGGATG
GGGAGGCTGCTGACTGACCCCCAAACATTGTTCCGGAA
GCACGCAACTCATAGTCGGGGTAAGTGCTACTCCCAAAA
AAGTTTGCGT

exon 3

CATGTCCTGCAGTGGGCAGGCAGCGGGAGGGACAGACTT
GGCGAAGGGGCCGAGCTCAGCTTTGGCTGTGGGGCCGGA
GGTGTGCACAGACGTCCAGGGCCCCTGGTTCCCAGGCAG
GCATTGCAGGCGAGTAGAAGGGAAACGTCCCATGCAG
CGGGGCGGGGCGTCTGACCCACTGGCTTCCCCCACAG

GGAGTTCAGGCACAAAAGCAACATCACCTTCAACAACAA
CGACACCGTGTCCTTCCTcGAGTACCGCACCTTCCAGTT
CCAGCCCTCCAAGTCCCACGGCTCGGAGAGCGACTACAT
CGTCATGCCCAACATCCTGGTCTTG
G
A
GTGAGGCTGCCCTGTGGCCCACGCCGCCTCGCACCCTGA
CCTCGTCCCCTGTCTCTCCTCCCGCCTGCCCCTTGTG
CAGAGAGCAGTCCCTGAGGTGGTCGGAGCGTGGGGACTC
ACGCCTGGTGGGTGGCTTTCGGCCCTGTGCTGTCTCCAC
CACCCCCA

Figure 2C

exon 4

GGTGGTTCTGGTGTCCCAGATGCCCCACGTGGCCACTCC
AGGGGCCTCCTGCACCCCAGCATTTCCCTTCATGGGCT
CTTTGCTGTGAGGCCCAGCTGGGGCCAAGGGAGGATG
GGCCAGCCACGTCCAGCCTCTGACACTAGTGTCCCTTCG
CCTTGCAG

GGTGCGGCGGTGATGATGGAGAATAAGCCCATGACCCTG
AAGCTCATCATGACCTTGGCATTCACCACCCTCGGCGAA
CGTGCCTTCATGAACCGCACTGTGGGTGAGATCATGTGG
GGCTACAAGGACCCCTTGTGAATCTCATCAACAAGTACT
TTCCAGGCATGTTCCCCTTCAAGGACAAGTTCGGATTAT
TTGCTGAG

GTACGTGTGGCCTGGTGAGAAGCCAAAGATTCAGGCCTG
TGTCCTG**TCTTCCCCTCACACAGCCTG**GACACTGGTC
ACCAGCTTGCTTTGTAGCTGGCTGGGGATCTAGTGGCTG
TGGGTTGTAAGTGACTGAGAACCTGACTCAAACCGGCTT
GAGTGAAA

exon 5

CCTCTCGGTCCCCAGACACTGGGCATTTGGCAGTGAACC
AGATGCTGGGGGCCCTGTCCTTCTGGTGGAGGGGGAGGA
GGGCTCA**GCCCAGAATGTTCAGACCAG**GCCGGCTCAA
TGGCAGGCCTAAGCCTTACGATGCTGTTCCCTGCTGTGT
CTGTAG

CTCAACAACTCCGACTCTGGGCTCTTCACGGTGTTCACG
GGGGTCCAGAACATCAGCAGGATCCACCTCGTGGACAAG
TGGAACGGGCTGAGCAAG

GTGAGGGGCGAGAGGCGAGGGCCCCTGTCGCCAGGGAGA
GGGGAGGGTGGGCCCGGCCATGGCTGCTCGGGAGTGGCA T
GGGACCAGAGAGCTCCTTCTTC**CTTTGTCGTGAAGAG**
GGTGCTGGGAGGATGAACACTCTTGAAGTTGGAGGAGGG
ATTTTA

Figure 2D

exon 6

TCTCTGTGTGTCTACATAGCCTGCCCTCTTCCCACCGTG
CCAGTATTGGGAATTGAGTGGCCGTGCGTGCACCAGGGT
GAGTTAGGTGTGCAG**CACCTGAGAGGGCTTATTA**AGG
GGCCTTGGCCCTACTGAGGGGTCTAGTCTGGATGCTTCC
CCCCAG

GTTGACTTCTGGCATTCCGATCAGTGCAACATGATCAAT
GGAACTTCTGGGCAAATGTGGCCGCCCTTCATGACTCCT
GAGTCCTCGCTGGAGTTCTACAGCCCGGAGGCCTGCCG

GTAATCACTGGGACTCGGGGCCTCCTGGGTTTCCTGGGT
AGCTCATGGCCAAATTCTGTGGTGTTGGCTGTGCACTT
GGAAAGCATTTTGACTCATCGTGGATTTGACTCAGTAG
CCCTTGGCACCAGCTTGAATTCTCTTTGGTCACACCACC
AAAAGC

exon 7

GGAGGTCGCTGCAGCTCCGCGGGTGAGAGATGGGGGCGG
TTTGGACCCGGGAGGTGGTAGCGCCCGTGGGGAGAAGTG
GCTGGATCTGGGCAGCCTTTGGCAGGGCCTGGCTCTGGC
CGCCGGGTCTGGGTGTCCCCCTCTCATCCTGTCTGTCC
CCTGCAG

ATCCATGAAGCTAATGTACAAGGAGTCAGGGGTGTTTGA
AGGCATCCCCACCTATCGCTTCGTGGCTCCCAAAACCCT
GTTTGCCAACGGGTCCATCTACCCACCCAACGAAGGCTT
CTGCCCGTGCCTGGAGTCTGGAATTCAGAACGTCAGCAC
CTGCAGGTTCA

GTACGTGCCGTCCCCTGTTCTGGGATNGCCGGAGGGTGT
TAGGTNTNGGGCACCTNANGGTTTATCTGCCCAATGCTG
TCTGCTTAATCTCTGGCCTCTGTACTCTTGATAACC
CATTAAGCCAAAAATATGATGCCTCTGGGACGATATCTG

Figure 2E

exon 8

TGGGGCTTTTTACAGAATGGAGGAAGGGATCCTCTCT
GTCGGGTATTATGGTCATCGCCACGGGGGTGCCGTGCAG
ACCACAGCTCTGTGCAGACTTCCGGAGTGGCAGGACGTG
CCAATATACTGTCGTTGTATGATGTCCCCTCCCTGCCCT
TGTTGTAG

GTGCCCCCTTGTTTCTCTCCCATCCTCACTTCCTCAACG
CGGACCCGGTTCTGGCAGAAGCGGTGACTGGCCTGCACC
CTAACCAGGAGGCACACTCCTTGTTCCTGGACATCCACC
CG

GTGAGCCCCTGCCATCCTCTGTGGGGGGTGGGTGATTCC
TGGTTGGAGCACACCTGGCTGCCTCCTCTCTCCCCAG
GCAGAGAGCTGCTGTGGGCTGGGGTGGTGGGAAGCCTGG
CTTCTAGAATCTCGAGCCACCAAAGTTCCTTACT

exon 9

CCCCAGCCTGTGGCTTGTTTTAGGTAAGATACAAGCAAG
CTCCACTGGGCAGTTAGCTGGGACGCCCACCCTCTTGAC
TGGGACCAGGGAAAAGAAGGTTGACTGTGTCCCTGGA
GCTTGGGGGTGGCCAGTCTCCTCACTGTGTTTGTTGCCG
CAG

GTCACGGGAATCCCCATGAACTGCTCTGTGAAACTGCAG
CTGAGCCTCTACATGAAATCTGTCGCAGGCATTGG

GTGAGTGGGGACTGGGAACTGGGGCTGCATTGCTCATTG
AGAGATTANGTGCTCAGTGCTCCAGTGTTCCCAGAC
TCCCCTGACATACCCCAGGAAACAGGGCATGGGGAAGGG
AGAGGGTCCTATTGGGGGTGGAATCCAGTCCCTGCTGAT
CTTCTC

Figure 2F

exon 10

ATGGCTCCTAAAGTGTTTCAGCTCATTGTTTATATTTGG
TGGTGAGGGTTTAGTGTGTGCAAAATTATACTAAACC
TGTTTAGATGTTGTATTCAAGCAGAATTAGATCAAGTTT
GGGTGTAAGACTTTGTTCCAACACCTATGTCTTGCTTAT
TTCCAG

ACAAACTGGGAAGATTGAGCCTGTGGTCCTGCCGCTGCT
CTGGTTTGCAGAG

GTAAGGGTGCGTTGGGCACAGCGTCGGGGGCTTTTGTTA
ATAGCCAATGTGGGCATTT**GAGGCAGGAGGCGGGGGG**
AGCACCTTGTAGAAAGGGAGAGGGCTGAGCCAGGGTAAC
CGGACTGTTACATGGACCAGCGTATCATACACTTCACCC
TGTC

exon 11

CCTGGAGGGAGGAGGTCCCTGGCAGGCTCCAACACATGC
TTTAGCCGGGAAGCTTGAGGTGGGGAAAAGCTGAGGCGG
GCACAGAGG**AAGGTGTTGGGTGGCATCTG**CGCTGTAG
CCCGCAGC[C]TGCGGCCCCAGCTCATGTGTTTGTCATTCT G
GTCTCCTCAG

AGCGGGGCCATGGAGGGGGAGACTCTTCACACATTCTAC
ACTCAGCTGGTGTTGATGCCCAAGGTGATGCACTATGCC
CAGTACGTCCTCCTGGCGCTGGGCTGCGTCCTGCTGCTG
GTCCCTGTCATCTGCCAAATCCGGAGCCAA

GTAGGTGCTGGCCAGAGGGCAGCCCGGGCTGACAGCCAT
TCGCTTGCCTGCTGGGGGAAAGGGGCCTCAGATCGGACC
CTCTGGCCAACCGCAGCCTGGAGCCCACCTCCAGCAG
CAGTCCTGCGTCTCTGCCGGAGTGGGAGCGGTCACTGCT
GGGGG

Figure 2G

exon 12

CCCCACATCTCAGCCACCTGCAATCGTTGAGGGTTGTTG
GACTCTAAACTTATGTGCCTTTCCTGTTTCCTCTTTGCC
TTTTGCAAATTGAAGAACCGTGTAAAACCATTTTTAT
GTGGCTTCAACGTCAACTATAAATTAGCTTGGTTATCTT
CTAG

GAGAAATGCTATTTATTTTGGAGTAGTAGTAAAAAGGGC
TCAAAGGATAAGGAGGCCATTCAGGCCTATTCTGAATCC
CTGATGACATCAGCTCCCAAGGGCTCTGTGCTGCAGGAA
GCAAAACTGTAG

GTGGGTACCAGGTAATGCCGTGCGCCTCCCCGCCCCCTC
CCATATCAAGTAGAATGCTGGCGGCTTAAAACATTTGGG
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TTGGAGAAA

Replacement Sheet

Figure 3A

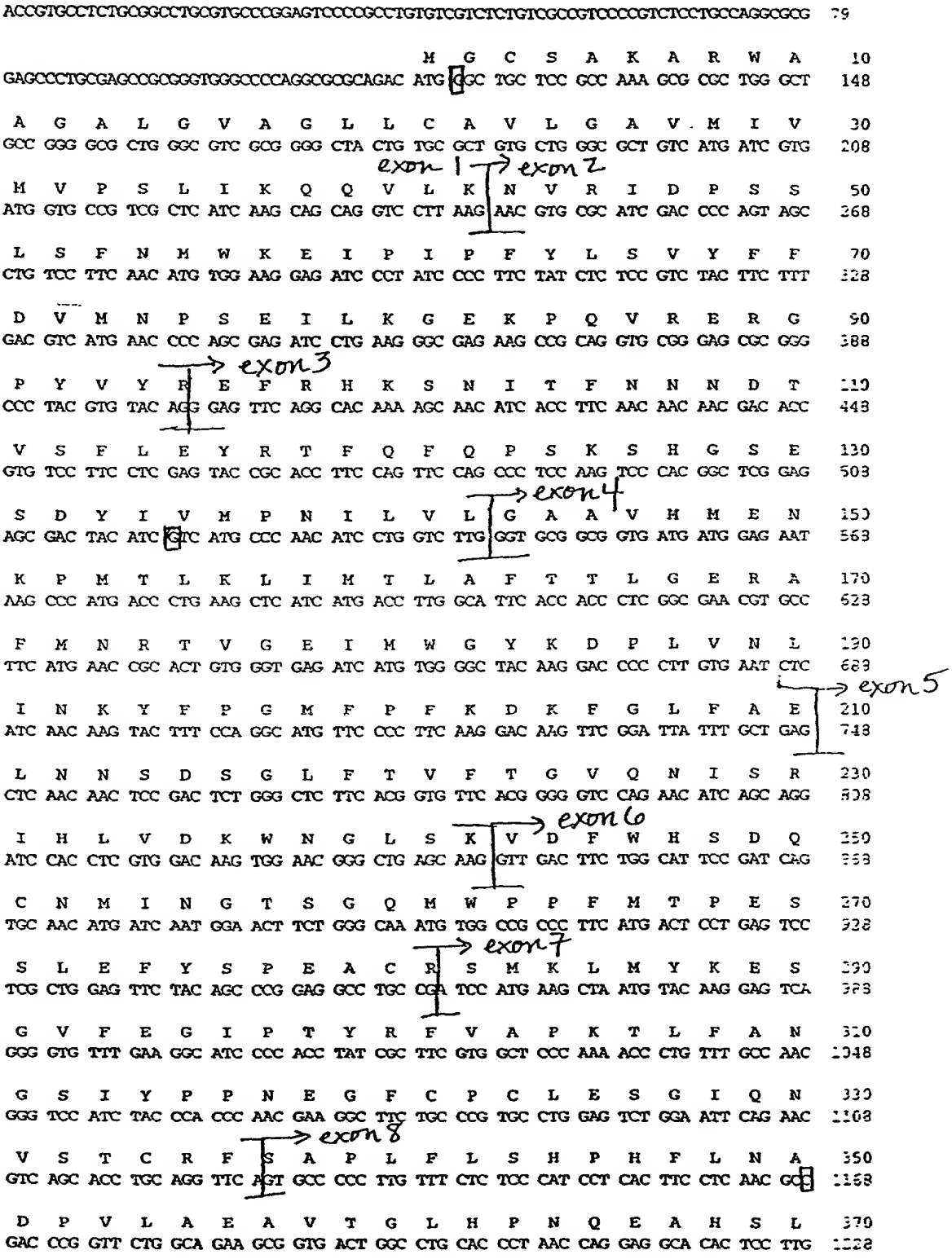
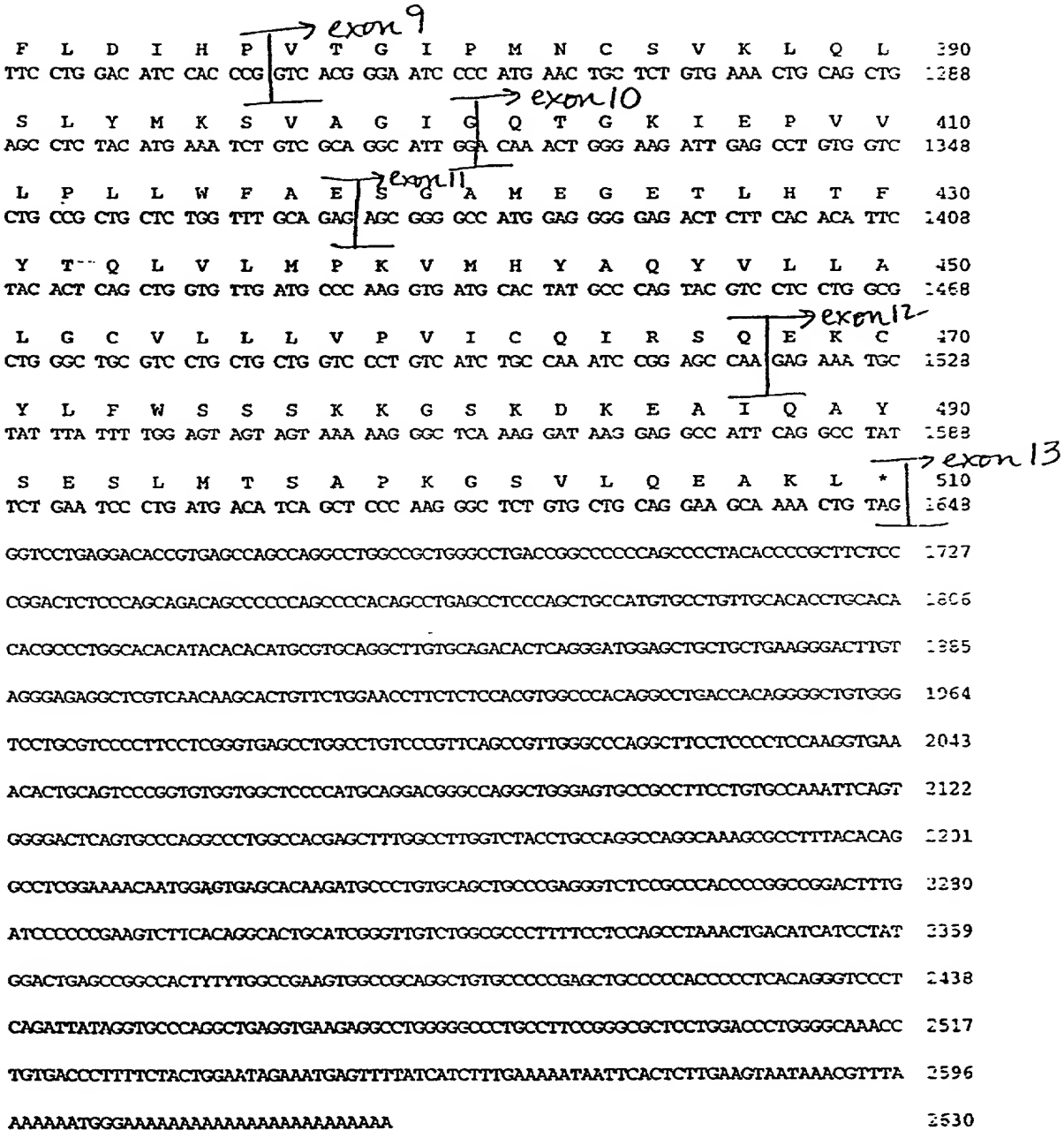


Figure 3B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exon10
exon11
exon12
exon13
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S L Y M K S V A G I G Q T G K I E P V V 410
AGC CTC TAC ATG AAA TCT GTC GCA GGC ATT GGA CAA ACT GGG AAG ATT GAG CCT GTG GTC 1348
L P L L W F A E S G A M E G E T L H T F 430
CTG CCG CTG CTC TGG TTT GCA GAG AGC GGG GCC ATG GAG GGG GAG ACT CTT CAC ACA TTC 1408
Y T Q L V L M P K V M H Y A Q Y V L L A 450
TAC ACT CAG CTG GTG TTG ATG CCC AAG GTG ATG CAC TAT GCC CAG TAC GTC CTC CTG GCG 1468
L G C V L L L V P V I C Q I R S Q E K C 470
CTG GGC TGC GTC CTG CTG CTG GTC CCT GTC ATC TGC CAA ATC CGG AGC CAA GAG AAA TGC 1528
Y L F W S S S K K G S K D K E A I Q A Y 490
TAT TTA TTT TGG AGT AGT AGT AAA AAG GGC TCA AAG GAT AAG GAG GCC ATT CAG GCC TAT 1588
S E S L M T S A P K G S V L Q E A K L * 510
TCT GAA TCC CTG ATG ACA TCA GCT CCC AAG GGC TCT GTG CTG CAG GAA GCA AAA CTG TAG 1648
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CGGACTCTCCCAGCAGACAGCCCCCCAGCCCCACAGCCTGAGCCTCCCAGCTGCCATGTGCCTGTTGCACACCTGCACA 1806
CACGCCCTGGCACACATACACACATGCGTGCAGGCTTGTGCAGACACTCAGGGATGGAGCTGCTGCTGAAGGGACTTGT 1885
AGGGAGAGGCTCGTCAACAAGCACTGTTCTGGAACCTTCTCTCCACGTGGCCCACAGGCCTGACCACAGGGGCTGTGGG 1964
TCCTGCGTCCCCTTCCTCGGGTGAGCCTGGCCTGTCCCGTTCAGCCGTTGGGCCCAGGCTTCCTCCCCTCCAAGGTGAA 2043
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Figure 4

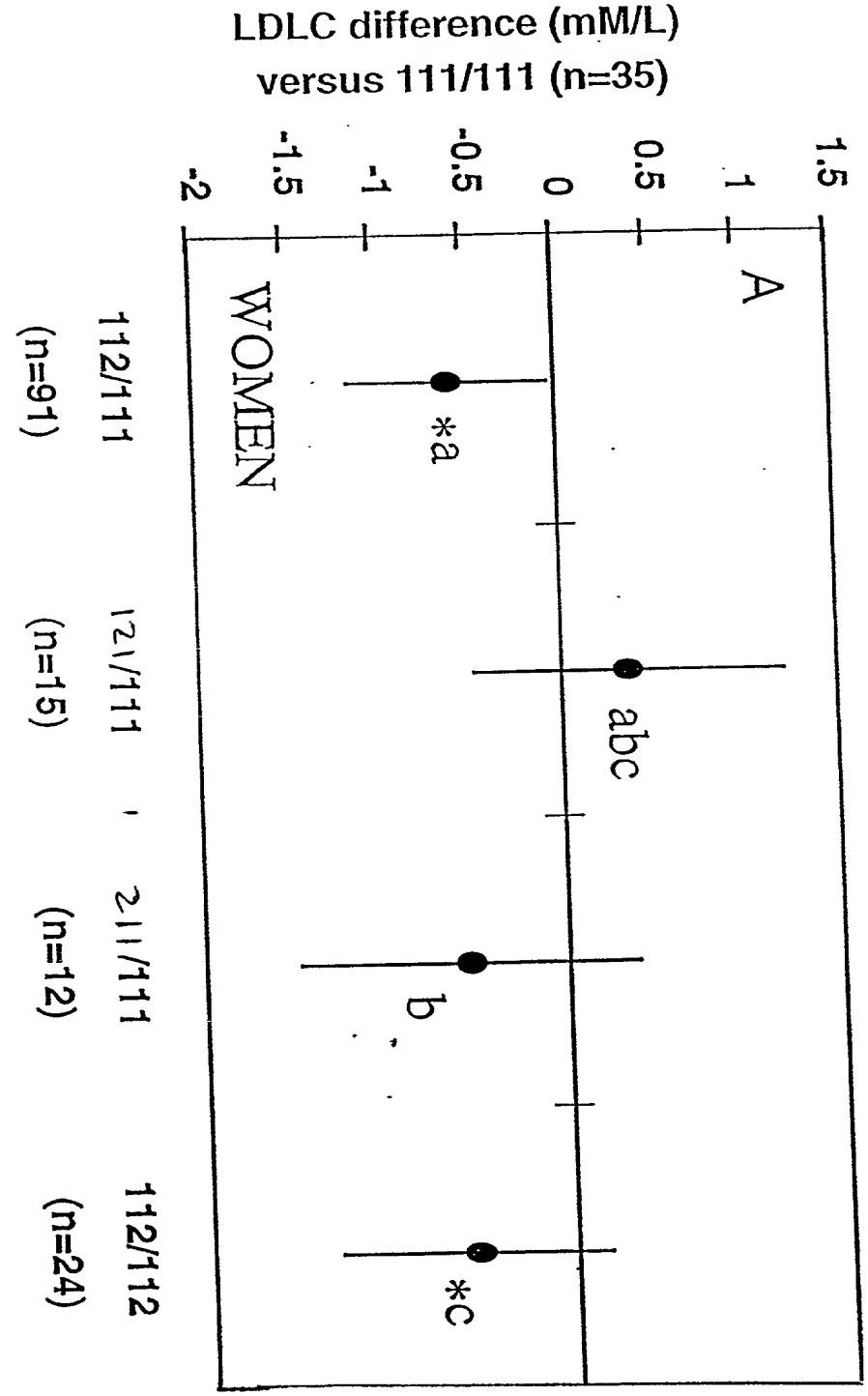

LDLC difference (mM/L)
versus 111/111 (n=35)
1.5
1
0.5
0
-0.5
-1
-1.5
-2
A
WOMEN
*a
abc
b
*c
112/111 (n=91)
121/111 (n=15)
211/111 (n=12)
112/112 (n=24)
Genotype

Figure 5

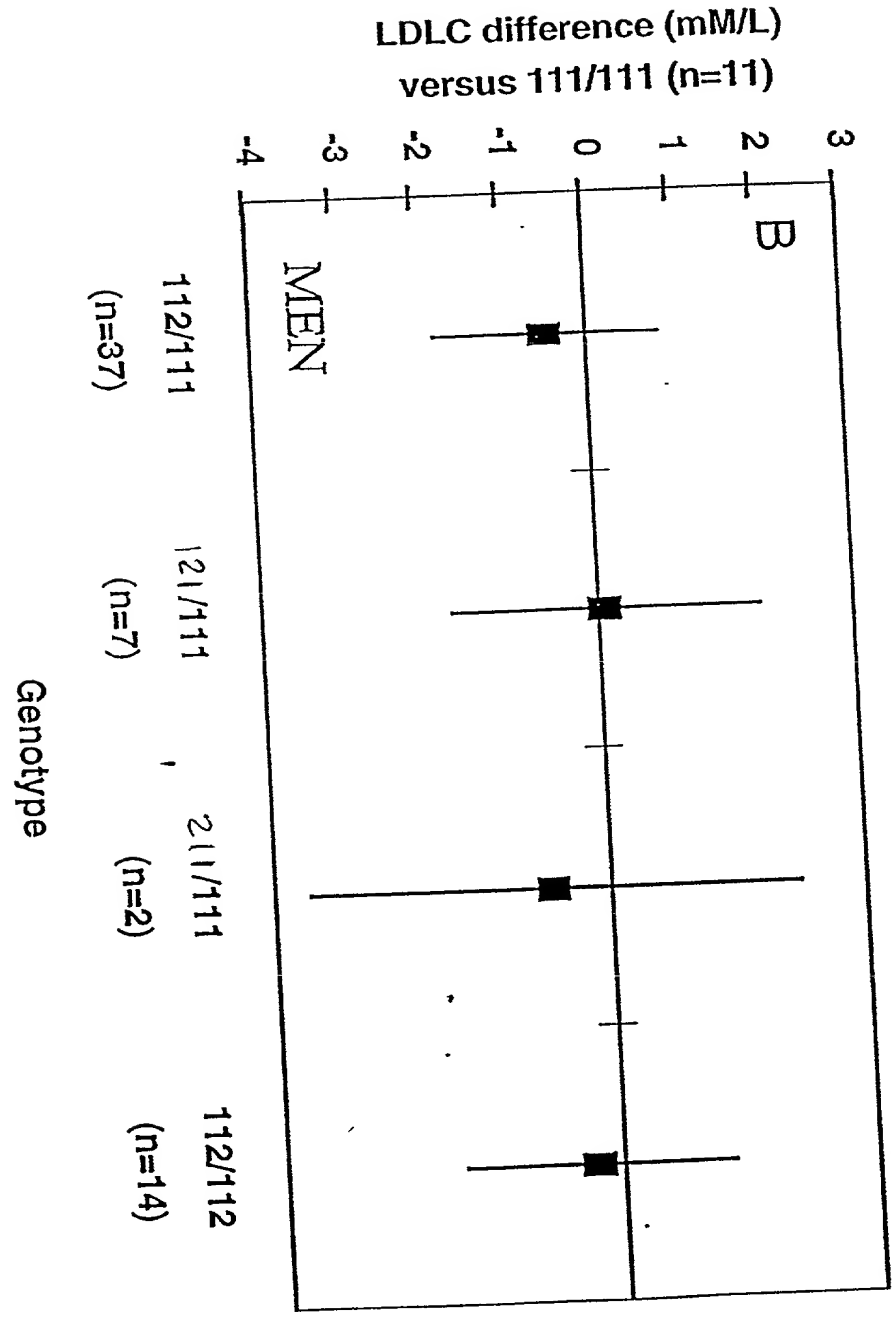

LDLC difference (mM/L)
versus 111/111 (n=11)
-4
-3
-2
-1
0
1
2
3
B
MEN
112/111
(n=37)
121/111
(n=7)
211/111
(n=2)
112/112
(n=14)
Genotype

Figure 6

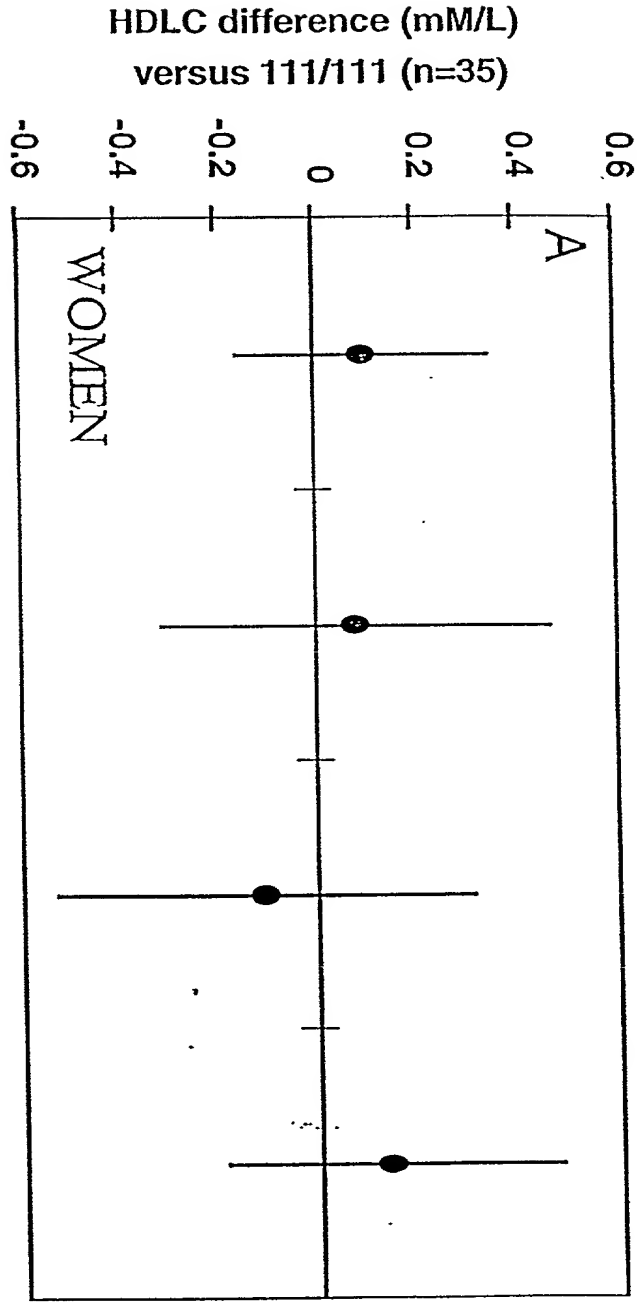

HDLC difference (mM/L)
versus 111/111 (n=35)
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
A
WOMEN
112/111 (n=91)
121/111 (n=15)
211/111 (n=12)
112/112 (n=24)
Genotype

Figure 7

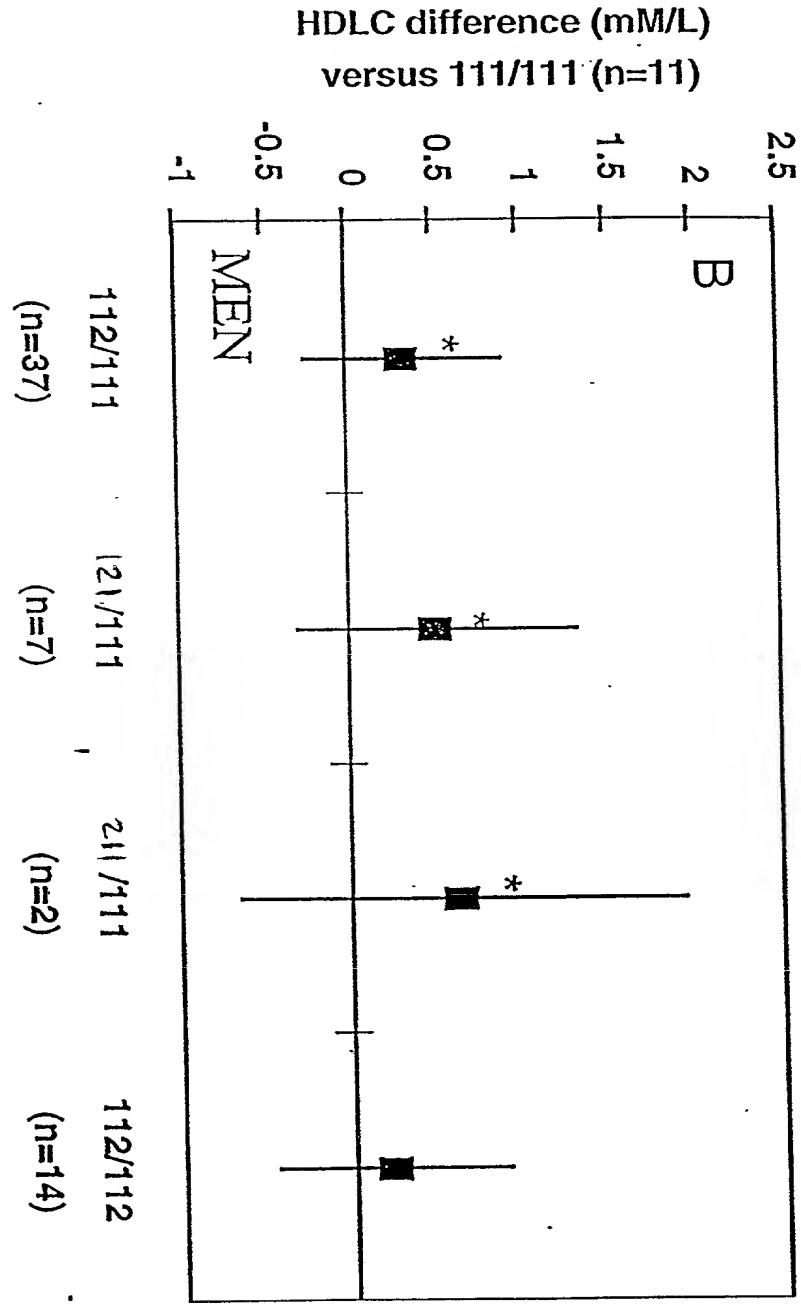

HDLC difference (mM/L)
versus 111/111 (n=11)
-1
-0.5
0
0.5
1
1.5
2
2.5
B
MEN
*
*
*
112/111 (n=37)
121/111 (n=7)
211/111 (n=2)
112/112 (n=14)
Genotype

Figure 8

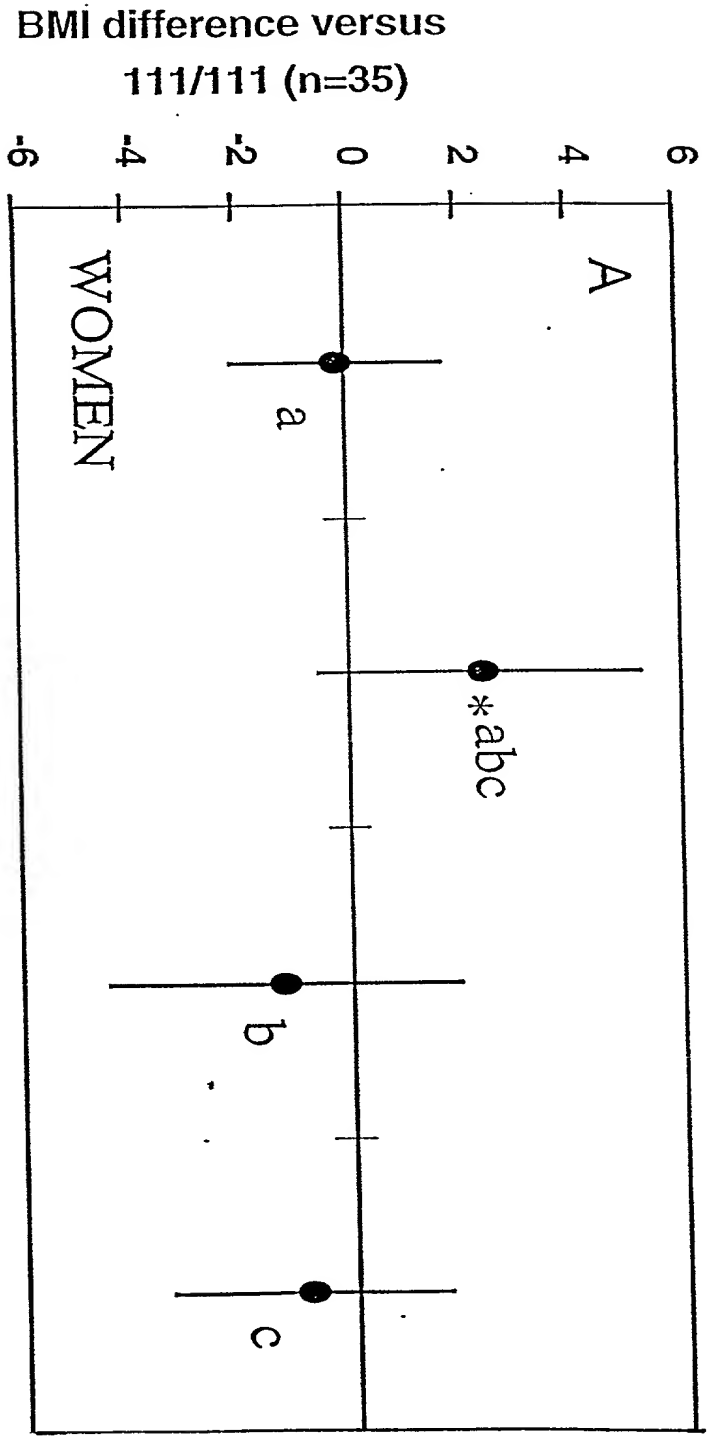
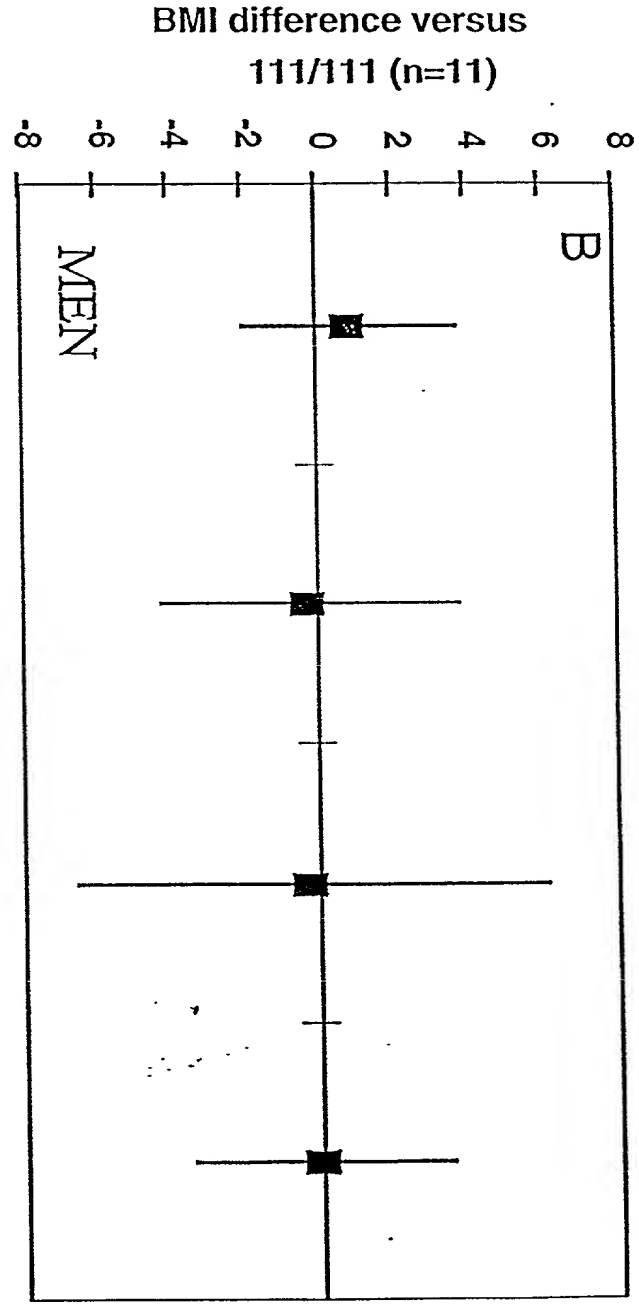

BMI difference versus
111/111 (n=35)
6
4
2
0
-2
-4
-6
A
WOMEN
a
*abc
b
c
112/111
(n=91)
121/111
(n=15)
211/111
(n=12)
112/112
(n=24)
Genotype

Figure 9


BMI difference versus
111/111 (n=11)
-8
-6
-4
-2
0
2
4
6
8
B
MEN
112/111
(n=37)
121/111
(n=7)
211/111
(n=2)
112/112
(n=14)
Genotype